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Congestion Control in Mobile Network by Prioritizing Handoff Calls

Authors: O. A. Lawal, O. A Ojesanmi

Abstract : The demand for wireless cellular services continues to increase while the radio resources remain limited. Thus, network operators have to continuously manage the scarce radio resources in order to have an improved quality of service for mobile users. This paper proposes how to handle the problem of congestion in the mobile network by prioritizing handoff call, using the guard channel allocation scheme. The research uses specific threshold value for the time of allocation of the channel in the algorithm. The scheme would be simulated by generating various data for different traffics in the network as it would be in the real life. The result would be used to determine the probability of handoff call dropping and the probability of the new call blocking as a way of measuring the network performance.

Keywords: call block, channel, handoff, mobile cellular network

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